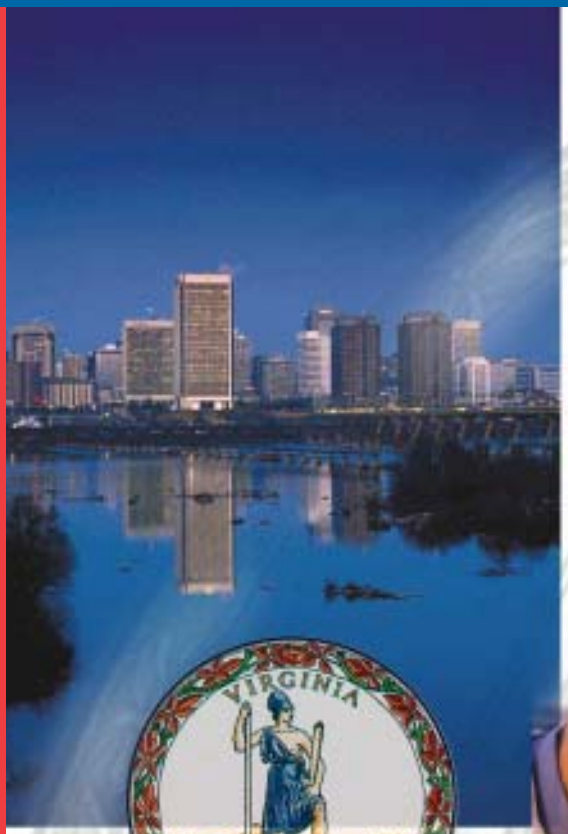
delmarva foundation



Commonwealth of Virginia Department of Medical Assistance Services

External Quality Review

Virginia Premier Health Plan

Performance Improvement Project Validation

SFY 2004

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Performance Improvement Project Validation Summary Virginia Premier Health Plan

Introduction

The Virginia Department of Medical Assistance Services (DMAS) requires all Managed Care Organizations (MCOs) participating in the Medallion II Program to have ongoing performance improvement projects (PIPs). The purpose of having MCOs conduct PIPs is to assist large systems in evaluating and improving health care processes that link to member outcomes.

PIP activity can offer states an insight into the strengths and weaknesses of a MCO's quality management system (QMS), as many projects typically run two to three years and use numerous resources internally and externally to target specific providers, enrollees, and others to show meaningful improvement in one measure. Minimum expectations for PIP activity is that the MCO is able to report on their performance in a specific area by producing valid data that can be collected, measured, analyzed, and reported on an annual basis.

DMAS is adhering to the regulations set forth in the Balanced Budget Act of 1997 requiring state Medicaid agencies to annually evaluate the quality of services furnished by each MCO to Medicaid enrollees.

In view of this requirement the DMAS established a contract with a quality improvement organization, Delmarva Foundation, Inc. (Delmarva), to serve as the External Quality Review Organization (EQRO) who will independently assess each Medallion II MCO's performance for the contract year of 2004.

Medallion II MCOs were required to submit one (1) asthma related PIP for the 2004 contract year. This report is a validation summary of Virginia Premier Health Plan (VPHP) PIP activity that speaks to the soundness of the PIP design and whether DMAS can have confidence in the reported results. At a minimum, Medallion II MCOs were expected to submit a project report with baseline measurement to the EQRO for validation. All of the Medallion II MCOs used audited Health Plan Employer Data and Information Set (HEDIS®) measures to evaluate performance in specific areas related to national benchmarks. Final HEDIS® reports are sent to MCOs in the summer; therefore, the MCOs submitted final PIPs to the EQRO in the fall of 2004.

Methodology

VPHP submitted their 2004 PIP on the National Committee's for Quality Assurance Quality Improvement Activity Form, which is the reporting tool that DMAS directed the MCOs to use when reporting their 2003 PIP activities. DMAS also agreed with the EQRO utilizing CMS' *Validation of PIPs* protocols as guidelines for review activities. To prepare each Medallion II MCO for the new validation requirements, Delmarva presented a four-hour program to orient the plans to the new BBA requirements and PIP Validation Protocols so that they would be familiar with the protocols used to evaluate their performance. CMS' Validation Protocols -"*Conducting and Validating Performance Improvement Projects"*- were presented to the MCOs in hardcopy during the PowerPoint presentation.

In addition to training nursing and health analysts in the QIA form, Delmarva staff received one eight-hour didactic educational program on the new EQR protocols. After developing a crosswalk between the QIA form and *Validating PIP Worksheet,* Delmarva staff developed review processes and worksheets using CMS' protocols as guidelines (2002). CMS' *Validation of PIPs* assist EQROs in evaluating whether or not the PIP was designed, conducted, and reported in a sound manner, and a state agency could have a degree of confidence in the reported results.

Review Activity

After VPHP submitted their 2004 PIP, *Asthma Control* electronically, a notice was sent from the EQRO to confirm receipt. The reviewers read the descriptions of VPHP's study design and subsequent analyses that would help the plan develop strong, self-sustained interventions over time to achieve meaningful improvement.

A registered nurse, with over 20 years of QI and Managed Care experience, and over 4 years quality improvement project review experience, completed the validation activity. A Review Manager assessed each validation worksheet. A summary report was developed for each validation worksheet. A copy of VPHP's PIP submission and PIP Validation Worksheets are included in addendum A1 and A2 respectively.

Findings

VPHP's PIP was sound methodologically, and the descriptions followed the NCQA QIA form instructions for reporting. VPHP's PIP targeted all Medicaid enrollees, ages five to fifty-six, by December 31 of the measurement year with a diagnosis of asthma for measures The purpose of VPHP's 2003 PIP was "to increase the use of controller medications in an effort to decrease hospital and emergency department

utilization by carefully planning its interventions to build on the previous ones and to progressively improve our efforts each year". The three goals of this PIP are:

1) To increase the number of enrollees who had one or more filled prescriptions for an appropriate asthma medication to 64%.
2) To decrease the number of hospital admissions per 1000 enrollees with asthma to 2 per 1000 enrollees.
3) To decrease the number of emergency department visits per 1000 enrollees with asthma to 350 per 1000 enrollees.

Decreased inpatient admissions and emergency department visits as well as use of appropriate asthma medications have been identified as valid proxy measures for improved health status. VPHP reported 2002 and 2003 performance, of which 2003 is considered baseline for this activity. No barrier analysis was provided. The plan submitted interventions initiated in 2003 and planned for 2004. No project barriers were identified.

Strengths and Opportunities for Improvement

Selection of study topic, problem statement, and indicators

Strengths: The study topic was approved by the DMAS. Decreased inpatient admissions and emergency department visits as well as use of appropriate asthma medications have been identified as valid proxy measures for improved health status.

Opportunities for Improvement: The plan did not describe an analysis of internal data to justify the rationale for the project's focus for the Medallion II population in 2003. A clear rationale would have been seen in a strong description of their selection and analysis of plan specific data. In addition, there was not a description of a problem statement that supports the rationale for the study.

Indicator descriptions of indicators two (Hospital Admissions/ 1000 members with Asthma) and three (Emergency Department (ED) Visits/1000 members with Asthma) were not clearly defined, as to indicate inclusion and exclusion criteria for the data sources (of these two measures). Additionally, two separate measurements for each of these indicators was provided: one for continuous enrollment and one for all enrollees-unduplicated; however, definitions of these indicators did not address different enrollment categories.

Study population

Strengths: Virginia Premier used technical specifications from the Health Plan Employer Data and Information Set (HEDIS) to define its study population, which is an industry standard, for the first indicator

that measures performance in dispensing of inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers or methylxanthines prescriptions in the measurement year.

Opportunities for improvement: The data collection approach for indicators #2 and #3 did not include a clear description of coding schemes used to pull the eligible population. Additionally, there was no clear description of the data collection approach for these two indicators to ensure that all eligible enrollees are included in the study.

Sampling methodology

Strengths: No sampling was used. The entire eligible population will be used for indicator one. The total number of hospital admissions and total emergency visits per 1000 enrollees with asthma will calculate indicators two and three.

Data collection procedures

Strengths: There was evidence of a plan to have an external certified HEDIS auditor audit data to ensure validity and reliability and to ensure consistency and accuracy in data collection tools. Their PIP specified that internal staff with a qualification statement of "second year collecting data administratively" and that they will use a HEDIS certified audit firm to audit the data.

Opportunities for improvement: The data to be collected and the sources of data were described in the PIP; however, as stated previously, inclusion and exclusion requirements (enrollment) were not clearly defined in the baseline methodology descriptions that speak to the validity of the data collection methods. Although VPHP specified a brief analysis plan, but there were inconsistencies. The report stated (section C4) that VPHP would collect and analyze performance on a quarterly basis, but the actual analysis (Analysis Cycle section) stated that the analysis activity would occur on a calendar year or annual basis.

VPHP did not describe how they would interpret the results and attribute the indicators' results to changes caused by the interventions.

Improvement strategies

Strengths: The PIP included a list of interventions directed at staff, enrollees, and providers.

Opportunities for improvement: There was no evidence of a barrier analysis activity completed after baseline measurement that would have showed the prioritization process and subsequent action plans developed by VPHP's Quality Management Team to develop and implement strong, self-sustaining interventions aimed at achieving meaningful improvement.

Data analysis and interpretation of study results

Strengths: The rate, benchmark, and MCO goals were presented accurately and clearly for the first two indicators. Sources were identified for changes in benchmarks.

Opportunities for improvement: It appears that there was an error in both the comparison benchmark and goal for the emergency department visits indicator. The plan stated that they added survey data to measure quality of life, but did not provide a description of the additional measure and technical specifications for review.

There was no evidence of an analysis of the extent to which the PIP was successful and any follow-up activities including an additional barrier analysis related to the identification of opportunities for meaningful improvement.

Evidence of real and sustained improvement

This is the baseline review year for this project using the new BBA requirements and PIP protocols.

Recommendations

To address opportunities for improvement, the reviewers make the final recommendations to strengthen future PIP reporting activities:

1) Describe results of internal data analysis and prioritization processes that explain the study's rationale.
2) Submit a clear problem statement that supports the rationale.
3) Clearly specify which inclusion/exclusion criteria will be used to identify the eligible population for each indicator.
4) Define the approach for event/diagnosis coding schemes for indicators two and three to clearly describe the population to be studied. Also, describe how the data collection approach did not exclude any eligible Medallion II enrollees.
5) Clarify the additional data collection method for the two different measures, continuous enrollment and all enrollees-unduplicated for indicators two and three.
6) Describe the approach to ensure that data was reliable and valid for indicators two and three.
7) Ensure that data analysis includes comparison of results with MCO goals as well as benchmarks. Ensure that data is presented accurately and that any changes to goals or benchmarks are explained.
8) Describe qualitative and quantitative analysis activities that evaluate barriers to performance. Ensure that interventions undertaken for each indicator are related to causes/barriers identified though analysis activities.
9) When evaluating real or sustained improvement, describe how VPHP's Quality Management System analyzed performance in each measure to determine the extent of which the PIP is successful.

Virginia Premier Health Plan, Inc. (VPHP)

ASTHMA CLINICAL STUDY

Activity Name: ASTHMA STUDY

Section I: Activity Selection and Methodology

A. Rationale. Use objective information (data) to explain your rationale for why this activity is important to members or practitioners *and* why there is an opportunity for improvement.

The purpose of this Asthma study is to increase the use of controller medications in an effort to decrease hospital and emergency department utilization by carefully planning its interventions to build on the previous ones and to progressively improve our efforts each year.

The quality initiative development process is a valuable management tool for Virginia Premier Health Plan, Inc. (VPHP). The process is driving the plan's general approach to quality improvement and the means by which their successes are documented. The discipline of continuing cycles of measurement is now systematized into plan processes. Indeed, many of this effort's lessons have been incorporated into newer activities, like the asthma registry, which is being modified for use with other diseases.

B. Quantifiable Measure(s). List and define *all* quantifiable measures used in this activity. Include a goal or benchmark for each measure. If a goal was established, list it. If you list a benchmark, state the source. Add sections for additional quantifiable measures as needed.

Quantifiable Measure #1:	One or more prescriptions for cromolyn sodium or aerosol corticosteroid
Numerator:	For each member in the denominator, those who had at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers, or methylxanthines in the measurement year. VPHP used the NDC list provided on NCQA's web site at www.ncqa.org to identify appropriate prescriptions.
Denominator:	The eligible population, which includes those individuals 5-56 by December 31 of the measurement year. For each product line, one for VPHP – Medicaid, the measure was reported for each of three age stratifications (based on age as of December 31 of the measurement year) and a combined rate: 5-9 years olds, 10-17 years old, 18-56 years old, and combined rate.
First measurement period dates:	January 1 – December 31, 2003
Baseline Benchmark:	62.8
Source of benchmark:	The State of Health Care Quality: 2003 Report, directed and developed by the National Committee for Quality Assurance (NCQA)
Baseline goal:	62.8
Quantifiable Measure #2:	Hospital Admissions/ 1000 members with Asthma
Numerator:	Total Number of asthma admissions to the hospital
Denominator:	Total Number of admissions to the hospital

First measurement period dates:	January 1 – December 31, 2003
Benchmark:	1.73
Source of benchmark:	Healthy People 2010
Baseline goal:	1.73
Quantifiable Measure #3:	Emergency Department (ED) Visits/1000 members with Asthma
Numerator:	Total Number of asthma ED visits
Denominator:	Total Number of ED visits
First measurement period dates:	January 1 – December 31, 2003
Benchmark:	3.89
Source of benchmark:	Centers for Disease Control (CDC), Division of Health Care Statistics
Baseline goal:	3.89
C. Baseline Methodology.	

QM #1: One or more prescriptions for cromolyn sodium or aerosol corticosteroid

Step 1: Identified members as having persistent asthma who, during the year prior to the measurement year, had any of the following:
at least one ED visit based on visit codes with asthma (ICD-9 codes 493) as the principal diagnosis
at least one acute inpatient discharge based on the visit codes, with asthma as the principal diagnosis
at least four outpatient asthma visits based on the visit codes in the Table E14-A (Volume 2, Hedis 2004, Technical Specifications Book), with asthma as one of the listed diagnoses and at least two asthma medication dispensing events
at least four asthma medication dispensing events (i.e., an asthma medication was dispensed on four occasions)
Step 2: For a member identified as having persistent asthma because of at least four asthma medication dispensing events, and leukotriene modifiers were the sole asthma medication dispensed, the member must:
meet any of the other four criteria (above)
have at least one diagnosis of asthma in any setting in the year prior to the measurement year

Numerator: For each member in the denominator, those who had at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolyn sodium, leukotriene modifiers or methylxanthines in the measurement year. VPHP used the NDC list provided on NCQA's web site at www.ncqa.org to identify appropriate prescriptions
Denominator: The eligible population, which includes those individuals 5-56 by December 31 of the measurement year. For each product line, one for VPHP – Medicaid, the measure was reported for each of three age stratifications (based on age as of December 31 of the measurement year) and a combined rate: 5-9 years olds, 10-17 years old, 18-56 years old, and combined rate.

QM #2: Hospital Admissions/ 1000 members with Asthma

Step 1: The total number of inpatient admissions to an acute care facility within the reporting year was tabulated.
Step 2: The total number of members with asthma was abstracted.
Step 3: The total number of hospital admissions/1000 members with asthma was calculated

Numerator: Total number of inpatient admissions to the hospital/1000 members with asthma
Denominator: Total number of inpatient admissions

QM #3: Emergency Department (ED) Visits/ 1000 members with Asthma

Step 1: The total number of members admitted to the ED visits within the reporting year was tabulated.
Step 2: The total number of members admitted to the ED with asthma was abstracted.
Step 3: The total number ED Visits/1000 members with asthma was calculated

Numerator: Total number of ED Visits/1000 members with asthma
Denominator: Total number of ED Visits

C.1 Data Sources.

[ ] Medical/treatment records
[X] Administrative data:
[X] Claims/encounter data [ ] Complaints [ ] Appeals [ ] Telephone service data [ ] Appointment/access data
[ ] Hybrid (medical/treatment records and administrative)
[X] Pharmacy data
[ ] Survey data (attach the survey tool and the complete survey protocol)
[ ] Other (list and describe):

_____

_____

C.2 Data Collection Methodology. Check all that apply and enter the measure number from Section B next to the appropriate methodology.

If medical/treatment records, check below:
[ ] Medical/treatment record abstraction

If survey, check all that apply:
[ ] Personal interview
[ ] Mail
[ ] Phone with CATI script
[ ] Phone with IVR
[ ] Internet
[ ] Incentive provided
[ ] Other (list and describe):

_____

_____

If administrative, check all that apply:
[X] Programmed pull from claims/encounter files of all eligible members
[ ] Programmed pull from claims/encounter files of a sample of members
[ ] Complaint/appeal data by reason codes
[X] Pharmacy data
[ ] Delegated entity data
[ ] Vendor file
[ ] Automated response time file from call center
[ ] Appointment/access data
[ ] Other (list and describe):

_____

_____

C.3 Sampling. If sampling was used, provide the following information. – THIS SECTION IS NOT APPLICABLE (Strictly administrative data only)

Measure	Sample Size	Population	Method for Determining Size *(describe)*	Sampling Method *(describe)*

C.4 Data Collection Cycle.	Data Analysis Cycle.
[ ] Once a year [ ] Twice a year [ ] Once a season **[X]** Once a quarter [ ] Once a month [ ] Once a week [ ] Once a day [ ] Continuous [ ] Other (list and describe): _____ _____	[ ] Once a year [ ] Once a season **[X**] Once a quarter [ ] Once a month [ ] Continuous [ ] Other (list and describe): _____ _____

C.5 Other Pertinent Methodological Features. Complete only if needed.

Data was collected administratively only. The hybrid method was not utilized. A NCQA Certified Hedis Vendor, Healthcare Data.com (HDC), will audit the administrative data on May 11-12, 2004.

D. Changes to Baseline Methodology. Describe any changes in methodology from measurement to measurement. **– THIS SECTION IS NOT APPLICABLE AS THIS IS VPHP'S FIRST YEAR COLLECTING THE DATA.**

Include, as appropriate:

- Measure and time period covered
- Type of change
- Rationale for change
- Changes in sampling methodology, including changes in sample size, method for determining size and sampling method
- Any introduction of bias that could affect the results

_____

_____

_____

_____

Section II: Data / Results Table

Complete for each quantifiable measure; add additional sections as needed.

#1 Quantifiable Measure: One or more prescriptions for cromolyn sodium or aerosol corticosteroid

Time Period Measurement Covers	Measurement	Numerator	Denominator	Rate or Results	Comparison Benchmark	Comparison Goal	Statistical Test and Significance*
	Baseline:						NA
JAN 1 – DEC 31, 2002	Remeasurement 1:	155	250	62%	62.8	64	
JAN 1 – DEC 31, 2003	Remeasurement 2:	156	252	61.9%	62.8	64	
	Remeasurement 3:						
	Remeasurement 4:						
	Remeasurement 5:						

#2 Quantifiable Measure: Hospital Admissions/ 1000 members with Asthma

Time Period Measurement Covers	Measurement	Numerator	Denominator	Rate or Results	Comparison Benchmark	Comparison Goal	Statistical Test and Significance*
	Baseline:						NA
JAN 1 – DEC 31, 2002	Remeasurement 1: Coninuous Enrollment	52	11253	4.62	1.73	2.00	
JAN 1 – DEC 31, 2002	Remeasurement 1.1: All Enrollees - Unduplicated	177	75503	2.34	1.73	2.00	
JAN 1 – DEC 31, 2003	Remeasurement 2: Continuous Enrollment	51	11253	4.53	1.73	2.00	
JAN 1 – DEC 31, 2003	Remeasurement 2.1: All Enrollees - Unduplicated	209	81538	2.56	1.73	2.00	
	Remeasurement 3:						
	Remeasurement 4:						
	Remeasurement 5:						

#3 Quantifiable Measure: Emergency Department (ED) Visits/1000 members with Asthma							
Time Period Measurement Covers	**Measurement**	**Numerator**	**Denominator**	**Rate or Results**	**Comparison Benchmark**	**Comparison Goal**	**Statistical Test and Significance***
	Baseline:						NA
JAN 1 – DEC 31, 2002	Remeasurement 1: Continuous Enrollment	165	11253	14.66	386	350	
JAN 1 – DEC 31, 2002	Remeausurement 1.1: All Enrollees - Unduplicated	632	75503	8.37	386	350	
JAN 1 – DEC 31, 2003	Remeasurement 2: Continous Enrollment	199	11253	17.68	386	350	
JAN 1 – DEC 31, 2003	Remeasurement 2.1: All Enrollees - Unduplicated	786	81538	9.64	386	350	
	Remeasurement 3:						
	Remeasurement 4:						
	Remeasurement 5:						

* If used, specify the test, p value, and specific measurements (e.g., baseline to remeasurement #1, remeasurement #1 to remeasurement #2, etc., or baseline to final remeasurement) included in the calculations. NCQA does not require statistical testing.

Section III: Analysis Cycle
Complete this section for EACH analysis cycle presented.

A. Time Period and Measures That the Analysis Covers.

1 Year – January 1, 2004 – December 31, 2004
Measures (see above)

B. Analysis and Identification of Opportunities for Improvement. Describe the analysis and include the points listed below.

B.1 For the quantitative analysis, include the analysis of the following:

- Comparison with the goal/benchmark – VPHP met the benchmark for QM #1; however, the benchmarks for the other two QMs were not met.
- Reasons for changes to goals – Added survey indicator to measure quality of life
- If benchmarks changed since baseline, list source and date of changes –Sources: QM #!: The State of Health Care Quality; QM#2: Health People 2010; QM#3: CDC
- **Comparison with previous measurements – Last year the measurement was per member; this year the measurement is per 1000 members**
  Last Year results: ER visits/mbr = 2.62 and Hosp admits = 1.14
- Trends, increases or decreases in performance or changes in statistical significance (if used) - NA
- Impact of any methodological changes that could impact the results - NA
- For a survey, include the overall response rate and the implications of the survey response rate - NA

B.2 For the qualitative analysis, describe any analysis that identifies causes for less than desired performance (barrier/causal analysis) and include the following:

- Techniques and data (if used) in the analysis – Administrative, claims/encounter data only
- Expertise (e.g., titles; knowledge of subject matter) of the work group or committees conducting the analysis – Internal staff – second year collecting data administrative ly; contracted with an experienced, external organization that is NCQA Certified to audit data
- Citations from literature identifying barriers (if any) - NA
- Barriers/opportunities identified through the analysis - NA
- Impact of interventions - NA

Section IV: Interventions Table

Interventions Taken for Improvement as a Result of Analysis. List chronologically the interventions that have had the most impact on improving the measure. Describe only the interventions and provide quantitative details whenever possible (e.g., "hired 4 customer service reps" as opposed to "hired customer service reps"). Do not include intervention-planning activities.

Date Implemented (MM / YY)	Check if Ongoing	Interventions	Barriers That Interventions Address
May 2004	X	PCPs will receive a listing quarterly of members who are currently receiving prescriptions for asthma without long-acting beta-agonist inhalers as well as members who have been hospitalized or seen in the ED for an asthma diagnosis.	No identifiable barriers at this time
June 2004	X	All newly identified members with a diagnosis of asthma will be sent a letter informing them of the Asthma management program and to contact VPHP's Health Educator for additional information.	No identifiable barriers at this time
August 2003	X	VPHP will identify PCPs with a high volume of asthma members and partner with the PCP to put peak flow meters and spacers in their office to dispense to members. In addition, these items are available through the member's pharmacy benefit and can be obtained with a prescription. Members with persistent asthma will be allowed a nebulizer to be kept at school if deemed medically necessary by their PCP.	No identifiable barriers at this time
February 2003	X	Members identified, as having persistent asthma will be contacted for individual case management with follow up with the member's PCP. VPHP's medical outreach staff will perform an in-home assessment on each member identified with persistent asthma including the member's self-assessment and quality of life survey. ***(Attachment A & B)***	No identifiable barriers at this time
February 2003	X	Members identified as having moderate asthma will receive education through enrollment in a community-based asthma education program. This program provides one-on-one or group instruction to help members and their families better understand the process related to asthma. Additionally, the program is designed to increase knowledge of prescribed medications, asthma triggers, and home maintenance of the asthma patient with 6 months f/u and evaluation.	No identifiable barriers at this time
February 2003	X	Members identified as having mild asthma will receive education through the mail from VPHP's Health Educator on self-monitoring, exercise, nutrition, weight management, medication and stress management.	No identifiable barriers at this time

June 2004	**X**	Quarterly communications will be included in the Provider Newsletter of new formulary choices and asthma management strategies and resources. Educational information for members to enhance patient self-care asthma management will be included in the quarterly member newsletter.	No identifiable barriers at this time
June 2004	**X**	VPHP will partner with community-based agencies, hospitals, PHOs and providers to present an annual training for providers on the rationale for the guidelines, patient education techniques, the use of peak flow meters, and the proper use of inhaled steroids.	No identifiable barriers at this time
September 2004		Members with persistent asthma will be sent reminders to receive an annual flu shot.	No identifiable barriers at this time
September 2003	**X**	The plan began by training its staff and practitioners about the rationale for the guidelines, patient education techniques, the use of peak flow meters, and the proper use of inhaled steroids. Interventions aimed at clinicians included monthly communication with primary care physicians (PCPs) about which of their patients had been enrolled in the educational program.	No identifiable barriers at this time

Section V: Chart or Graph (Optional)

Attach a chart or graph for any activity having more than two measurement periods that shows the relationship between the timing of the intervention (cause) and the result of the remeasurements (effect). Present one graph for each measure unless the measures are closely correlated, such as average speed of answer and call abandonment rate. Control charts are not required, but are helpful in demonstrating the stability of the measure over time or after the implementation.

NOT APPLICABLE – OPTIONAL AND VPHP HAS NOT HAD MORE THAN TWO MEASUREMENT PERIODS

Performance Improvement Project Validation Worksheet

Project Information
MCO/PHP Name or ID: Virginia Premier Health Plan, Inc.
PIP Topic: Asthma Study
Dates in Study Period: 1/1/2002 to 12/31/2003 **Dates of Review Period:** 1/1/2003 to 12/31/2003

I. ACTIVITY 1: ASSESS THE STUDY METHODOLOGY

Step 1. REVIEW THE SELECTED STUDY TOPIC(S)

Component/Standard	Y	N	N/A	Comments	Cites and Similar References
1.1 Was the topic selected through data collection and analysis of comprehensive aspects of enrollee needs, care and services?	☐	☒	☐	Although DMAS chose the study topic (asthma), there was an expectation that Virginia Premier Health Plan (VPHP) describe an analysis of internal data to justify the rationale for the project's focus for the Medallion II population in 2003. A clear rationale would have been seen in a strong description of their selection and analysis of plan specific data.	QAPI RE2Q1 QAPI RE2Q2,3,4 QIA S1A1
1.2 Did the MCO s/PHP s PIP address a broad spectrum of key aspects of enrollee care and services?	☒	☐	☐	This clinical PIP will have to address specific care and services provided to VPHP Medicaid HMO enrollees aged 5-56 years with a diagnosis of asthma that are admitted to the ER or to the hospital in order to decrease the utilization in both areas.	QAPI RE2Q1 QIA S1A2
1.3 Did the MCOs/PHPs PIP include all enrolled populations; i.e. , did not exclude certain enrollees such as with those with special health care needs?	☒	☐	☐	According to the description of the population, VPHP will include all Medallion II enrollees aged 5-56 years with a diagnosis of asthma in their study. There were no exclusions made for either indicator.	QAPI RE2Q1 QIA S1A2

Assessment Component 1

☐ Met – All required components are present.

☒ Partially Met – Some, but not all components are present.

☐ Unmet -None of the required components are present.

I. ACTIVITY 1: ASSESS THE STUDY METHODOLOGY
Step 1. REVIEW THE SELECTED STUDY TOPIC(S)
Recommendations Describe a clear rationale through a description of prioritization and /or selection activities and analyses of plan specific data.

Step 2: REVIEW THE STUDY QUESTION(S)					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
2.1 Was there a clear problem statement that described the rationale for the study?	☐	☒	☐	Because the rationale was not clear, a clear problem was not identified. VPHP alluded to previous activity, but did not provide information to identify what the problems were and if they remained constant during this project cycle.	QIA S1A3

Assessment Component 2

☐ Met – All required components are present.

☐ Partially Met – Some, but not all components are present.

☒ Unmet -None of the required components are present.

Recommendations

Submit a problem statement that supports the rationale for the study.

Step 3: REVIEW SELECTED STUDY INDICATOR(S)					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
3.1 Did the study use objective, clearly defined, measurable indicators?	☐	☒	☐	Not for all indicator descriptions. Ind #1: one or more prescriptions for cromolyn sodium or aerosol corticosteroid, Ind #2: hospital admissions/1000 members with asthma, Ind #3: emergency department visits/1000 members with asthma. Ind #1 was clearly defined and measurable. It included diagnostic codes for asthma as a primary diagnosis and specific utilization criteria. Ind #2 and #3 descriptions were not clearly defined, as the descriptions did not include a definition of asthma, i.e., ICD9 codes or additional criteria to clearly identify what data would be collected to calculate or measure performance. The 2004 HEDIS technical specifications, page 127, states "the plan should have described which applicable coding schemes to identify the event/diagnosis for indicators #2 and #3." Additionally, under the "Data/Results Table" for indicators #2 and #3 there were two measurements for each indicator: one for continuous enrollment and one for all enrollees-unduplicated, however, the separate data collection method was not defined in section C2. The "Analysis	QAPI RE3Q1, QAPI RE3Q2-6 QAPI RE3Q7-8 QIA S1B2 QIA S1B3

Step 3: REVIEW SELECTED STUDY INDICATOR(S)					
				and Identification of Opportunities for Improvement" section reported the addition of a survey indicator to measure quality of life, although there was no other reference to this indicator in PIP documentation.	
3.2 Did the indicators measure changes in health status, functional status, or enrollee satisfaction, or processes of care with strong associations with improved outcomes?	☒	☐	☐	Decreased inpatient admissions and emergency department visits as well as use of appropriate asthma medications have been identified as valid proxy measures for improved health status.	QAPI RE3Q9 QIA S1B1

Assessment Component 3

☐ Met – All required components are present.

☒ Partially Met – Some, but not all components are present.

☐ Unmet -None of the required components are present

Recommendations

According to HEDIS technical specifications, plans are to describe the applicable coding schemes to identify the event/diagnosis for indicators #2 and #3. Clearly specify which inclusion/exclusion criteria will be used (see table 14-A and 14-B in HEDIS tech specs) to identify eligibles for each indicator. Additionally, VPHP will need to clarify the additional data collection method in section C2 of the QIA form, and possibly develop rationales, separate indicators and goals for the two different measurements (Continuous enrollment and enrollees- unduplicated).

Step 4: REVIEW THE IDENTIFIED STUDY POPULATION					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
4.1 Did the MCO/PHP clearly define all Medicaid enrollees to whom the study question(s) and indicator(s) are relevant?	☐	☒	☐	HEDIS specifications were used for indicator #1 which meets this standard. As stated earlier, VPHP did not define their approach for event/diagnosis for indicators #2 and #3, therefore, a clear definition of the eligible study population was not provided for this review component.	QAPI RE2Q1, QAPI RE3Q2-6
4.2 If the MCO/PHP studied the entire population, did its data collection approach capture all enrollees to whom the study question applied?	☐	☒	☐	VPHP's 2003 data for indicator #1 received a reportable designation by a certified HEDIS auditor in 2004. The data collection approach for indicators #2 and#3 did not include a clear description of coding schemes used to pull the eligible population.	QAPI RE4Q1&2 QAPI RE5Q1.2 QIA I B, C

Assessment Component 4

☐ Met – All required components are present.

☐ Partially Met – One, but not all components are present.

☒ Unmet -None of the required components are present.

Recommendations

As requested in the 2004 HEDIS technical specifications and to provide clarification for this standard, define the approach for event/diagnosis coding schemes for indicators #2 and #3 to clearly describe the population to be studied. Also, describe how the data collection approach did not exclude any eligibles.

Step 5: REVIEW SAMPLING METHODS					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
5.1 Did the sampling technique consider and specify the true (or estimated) frequency of occurrence of the event, the confidence interval to be used, and the margin of error that will be acceptable?	☐	☐	☒	No sampling was used. Virginia Premier included the entire eligible population in the PIP.	QAPI RE5Q1.3a QIA S1C2
5.2 Did the MCO/PHP employ valid sampling techniques that protected against bias? *Specify the type of sampling or census used:*	☐	☐	☒		QAPI RE5Q1.3b-c QIA S1C2
5.3 Did the sample contain a sufficient number of enrollees?	☐	☐	☒		QAPI RE5Q1.3b-c QIA S1C2

Assessment Component 5

☐ Met – All required components are present.

☐ Partially Met – Some, but not all components are present.

☐ Unmet -None of the required components are present.

☒ Not applicable.

Recommendations

Step 6: REVIEW DATA COLLECTION PROCEDURES					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
6.1 Did the study design clearly specify the data to be collected?	☒	☐	☐	The "Baseline Methodology" section specified the data to be collected for the numerator and the denominator for each indicator. For indicator #1 HEDIS data requirements were specified. For indicators #2 and #3 utilization data was clearly defined, however, diagnostic codes for asthma were not identified which was stated previously. Enrollment requirements were included in the "Data/Results Table" section, and also needs to be stated in the indicator description section.	QAPI RE4Q1&2
6.2 Did the study design clearly specify the sources of data	☒	☐	☐	Sources of data were clearly identified to include: claims/encounter data and pharmacy data.	QAPI RE4Q1&2
6.3 Did the study design specify a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicator(s) apply?	☐	☒	☐	The data collection methodology was specified as a programmed pull from claims/encounter files of all eligible members as well as pharmacy data. It is unclear whether pharmacy data will be collected manually or through an automated system. The PIP documentation stated that an NCQA certified HEDIS auditor was scheduled to audit data on May 11-12, 2004. This will ensure validity and reliability of data collected for indicator #1, but the event/diagnosis approach was not described for indicators #2 and #3.	QAPI RE4Q3a QAPI RE4Q3b QIA S1C1 QIA S1C3
6.4 Did the instruments for data collection provide for consistent, accurate data collection over the time periods studied?	☒	☐	☐	The PIP documentation stated that an NCQA certified HEDIS auditor was scheduled to audit data on May 11-12, 2004. A description of the outcome for these measures will be expected in future reports to speak to the validity and reliability of the data collection approaches.	QAPI RE4Q1&2 QAPI RE4Q3b QAPI RE7Q1&2

Step 6: REVIEW DATA COLLECTION PROCEDURES					
6.5 Did the study design prospectively specify a data analysis plan?	☒	☐	☐	Although the plan specified a brief analysis plan found in different areas of the report, VPHP did not describe how they would interpret the results and attribute the indicator's results to changes caused by the interventions. The data collection and analysis cycle was identified as once a quarter; however, the "Data/Results Table" section evidenced data analysis followed each calendar year measurement period. Qualitative data for the entire eligible population was collected on appropriate asthma medication rates, hospital admissions, and Emergency Department visits. While there was no stated plan to compare results to previous or similar studies, the quantitative analysis section stated that VPHP compared their results with the benchmark.	QAPI RE5Q1.2
6.6 Were qualified staff and personnel used to collect the data?	☒	☐	☐	VPHP specified that internal staff with a qualification statement of "second year collecting data administratively" and that they will use a HEDIS certified audit firm to audit the data.	QAPI RE4Q4

Assessment Component 6

☐ Met – All required components are present.

☒ Partially Met – Some, but not all components are present.

☐ Unmet -None of the required components are present.

Step 6: REVIEW DATA COLLECTION PROCEDURES
Recommendations In the next submission, VPHP will be asked to clearly state their data collection methodology and analysis plan for each indicator. This would include whether data collection is manual or automated. A description of the HEDIS audit results for the measures can speak to the validity and reliability of the data collection approaches. The data analysis plan should specify whether the data collected would be compared to MCO goals and/or benchmarks as well as prior measurement periods. Any comparisons by age stratification (for indicator #1) and enrollment (for indicators #2 and #3) should also be specified.

Step 7: ASSESS IMPROVEMENT STRATEGIES					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
7.1 Were reasonable interventions undertaken to address causes/barriers identified through data analysis and QI processes undertaken?	☐	☒	☐	Since HEDIS results were available in July, the plan was expected to have convened to review baseline results for data year 2003. A list of interventions for 2003 and 2004 were described. There was no evidence of a barrier analysis activity completed after baseline measurement that would have showed the prioritization process and subsequent action plans developed by VPHP's Quality Management Team to develop and implement strong, self-sustaining interventions aimed at achieving meaningful improvement.	QAPI RE6Q1a QAPI RE6Q1b QAPI RE1SQ1-3 QIA S3.5 QIA S4.1 QIA S4.2 QIA S4.3

Assessment Component 7

☐ Met – All required components are present.

☐ Partially Met – Some, but not all components are present.

☒ Unmet -None of the required components are present.

Recommendations

Submit a description of 2004 barrier analysis activities that sought to evaluate baseline performance of each measure. Describe the methods (i.e. committee review and analysis of data using CQI processes/tools) and how the analysis served to develop each intervention that should link back to each or all of the indicators.

Step 8: REVIEW DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
8.1 Was an analysis of the findings performed according to the data analysis plan?	☐	☒	☐	The data analysis cycle was specified as once a quarter; however, the "Analysis Cycle" section stated that the analysis was based on calendar year results. A quantitative analysis was included for each indicator comparing results to benchmarks, however, there was no comparison to MCO goals for each indicator. For indicators #2 and #3, there was a notation that the prior measurement was based on members while the current measurements were based upon 1000 members. There was no evidence of a qualitative analysis.	QAPI RE4Q4 QIA III
8.2 Did the MCO/PHP present numerical PIP results and findings accurately and clearly?	☐	☒	☐	The "Data/Results Table" section accurately and clearly identified the rate, benchmark, and MCO goal for indicators #1 and #2. For indicator #3, there appeared to be an error in both the comparison benchmark and comparison goal stated as 386 and 350 respectively while the "Quantifiable Measures" section included a comparison benchmark of 3.89.	
8.3 Did the analysis identify: initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external validity?	☐	☒	☐	Although multiple measurements were submitted, this project is considered at its baseline year for data year 2003. Remeasurements for two time periods were included and comparison of results to benchmark was included for each indicator for one remeasurement. Sources were identified for changes in benchmarks; however, the date of the change was not identified. There was no explanation provided for changes to the goals for any indicator. There was no evidence of tests of statistical significance (marked N/A).	QAPI RE7Q2 QIA S1C4 QIA S2.1

Step 8: REVIEW DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS					
8.4 Did the analysis of study data include an interpretation of the extent to which its PIP was successful and follow-up activities?	☐	☒	☐	Baseline measurement year - data analysis did not include an interpretation of the extent to which the baseline results compared against benchmarks/goals. Activities were listed for 2003 and 2004; however, they were not related to any opportunities for improvement identified through barrier analysis related to each indicator.	QIA S2.2

Assessment Component 8

☐ Met – All required components are present.

☐ Partially Met – Some, but not all components are present.

☒ Unmet -None of the required components are present.

Recommendations

Describe how VPHP ensured that data was reliable and valid. Explain how the survey indicator was developed – what analysis of barrier/root cause and literature supports this addition? Provide full citations for literature that assisted in the change of benchmarks. What month did the benchmark change occur? In addition to a quantitative analysis of the results, there should be a qualitative analysis that includes a statement of the extent to which the PIP was successful and any follow-up activities (additional barrier analysis) related to the identification of opportunities for meaningful improvement. At a minimum, tests of statistical significance should be completed for each indicator based upon changes between baseline and each remeasurement.

Step 9: ASSESS WHETHER IMPROVEMENT IS REAL IMPROVEMENT					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
9.1 Was the same methodology as the baseline measurement used when measurement was repeated?	☒	☐	☐	PIP documentation stated that a change was made in indicators # 2 and #3 from a per member to per/1000 member measure, however, all PIP study documentation included the per/1000 member measure.	QAPI RE7Q2 QAPI 2SQ1-2 QIA S1C4 QIA S2.2 QIA S3.1 QIA S3.3 QIA S3.4
9.2 Was there any documented quantitative improvement in processes or outcomes of care?	☒	☐	☐	Yes, in one indicator. Generally, results deteriorated for each indicator from remeasurement 1 to remeasurement 2 with only one exception. Indicator #1 evidenced a very slight deterioration in performance from remeasurement 1 (62%) to remeasurement 2 (61.9%). Indicator #2 demonstrated a slight improvement for the continuously enrolled population from remeasurement 1 (4.62) to remeasurement 2 (4.53). For all enrollees- unduplicated there was a slight deterioration in performance from remeasurement 1 (2.34) to remeasurement 2 (2.56). For indicator # 3 there was a substantial deterioration in performance for the continuously enrolled population from remeasurement 1 (14.66) to remeasurement 2 (17.68). Additionally, there was a deterioration in results for all enrollees- unduplicated from remeasurement 1 (8.37) to remeasurement 2 (9.64).	QAPI RE7Q3 QIA S2.3

Step 9: ASSESS WHETHER IMPROVEMENT IS REAL IMPROVEMENT					
9.3 Does the reported improvement in performance have face validity; i.e., does the improvement in performance appear to be the result of the planned quality improvement intervention?	☐	☒	☐	Indicator #2 (Hospital Admission for Asthma/1000 members) demonstrated a slight improvement for the continuously enrolled population from remeasurement 1 (4.62) to remeasurement 2 (4.53). Two interventions (individual case management targeting members with asthma diagnosis and community based asthma program) may have caused the decrease in hospital admissions, but the intervention description is too broad to say that there is face validity – that this intervention was clearly linked to the indicator. For example, were the members in the intervention admits to the hospital only (did not seem to be)? Were physicians who had members admitted for asthma targeted?	QIA S3.2
9.4 Is there any statistical evidence that any observed performance improvement is true improvement?	☐	☒	☐	No statistical testing was described.	QIA S2.3

Assessment Component 9

☐ Met – All required components are present.

☒ Partially Met – Some, but not all components are present.

☐ Unmet -None of the required components are present.

Recommendations

For the intervention to have face validity, the description must contain evidence that links the intervention to the indicator. It also helps to identify the root cause or barrier that will be addressed by the intervention (for example, what were the identified barriers that cause VPHP's Medallion II members to seek admission for asthma? And what is being done to address these barriers?). Statistical testing of the observed improvement will give the state confidence in the results.

Step 10: ASSESS SUSTAINED IMPROVEMENT					
Component/Standard	**Y**	**N**	**N/A**	**Comments**	**Cites and Similar References**
10.1 Was sustained improvement demonstrated through repeated measurements over comparable time periods?	☐	☐	☒	Not a SI measurement year.	QAPI RE2SQ3 QIA II, III
Assessment Component 10 ☐ Met – All required components are present. ☐ Partially Met – Some, but not all components are present. ☐ Unmet -None of the required components are present.					
Recommendations					

Key Findings

1. **Strengths of the PIP submission**
   - VPHP researched and adopted well-established benchmarks from organizations including the National Committee for Quality Assurance and the Centers for Disease Control. One benchmark was obtained from Healthy People 2010.
   - Indicator #1 was clearly defined and measurable. It included diagnostic codes for asthma as a primary diagnosis and specific utilization criteria.
   - VPHP has included plans to engage a certified HEDIS auditor to validate its PIP data.

2. **Best Practices**

   None identified.

3. **Potential /significant issues experienced by MCO**

   None identified.

4. **Actions taken by MCO**

   Interventions undertaken by the MCO did not appear related to any identified opportunities for improvement. Interventions included staff and provider training, enrollee education, and case management.

5. **Recommendations:**
   - Describe results of internal data analysis and prioritization processes that explain the study's rationale.
   - Submit a clear problem statement that supports the rationale.
   - Clearly specify which inclusion/exclusion criteria will be used to identify the eligible population for each indicator.
   - Define the approach for event/diagnosis coding schemes for indicators two and three to clearly describe the population to be studied. Also, describe how the data collection approach did not exclude any eligible Medallion II enrollees.
   - Clarify the additional data collection method for the two different measures, continuous enrollment and all enrollees-unduplicated for indicators two and three.
   - Describe the approach to ensure that data was reliable and valid for indicators two and three.
   - Ensure that data analysis includes comparison of results with MCO goals as well as benchmarks. Ensure that data is presented

Key Findings
accurately and that any changes to goals or benchmarks are explained. ➢ Describe qualitative and quantitative analysis activities that evaluate barriers to performance. Ensure that interventions undertaken for each indicator are related to causes/barriers identified though analysis activities. ➢ When evaluating real or sustained improvement, describe how VPHP's Quality Management System analyzed performance in each measure to determine the extent of which the PIP is successful.